

# Drought-Related Disasters & Hazards

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Hazard Assessment Officer  
Arizona Department of Emergency and Military Affairs

**Governor's Drought Interagency Coordinating Group**

Tuesday, November 6, 2012

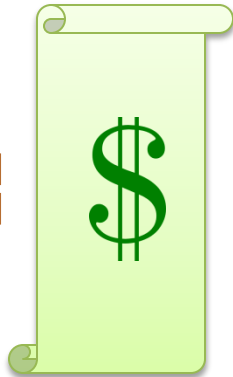
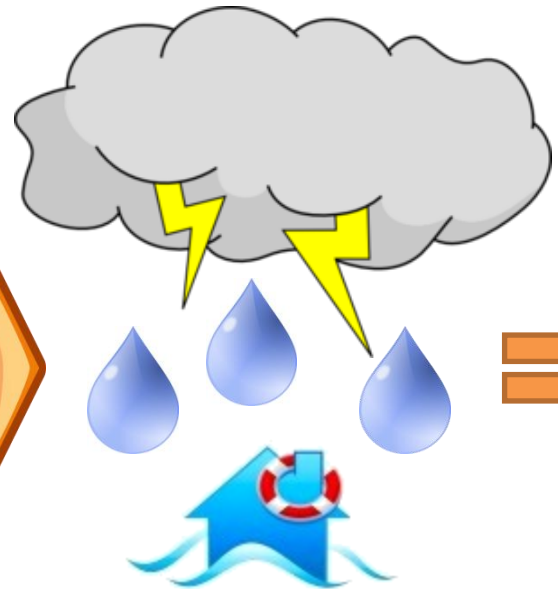
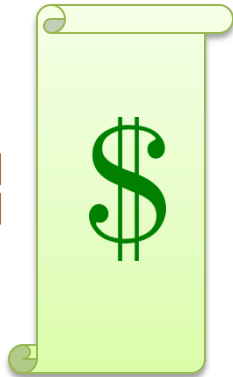
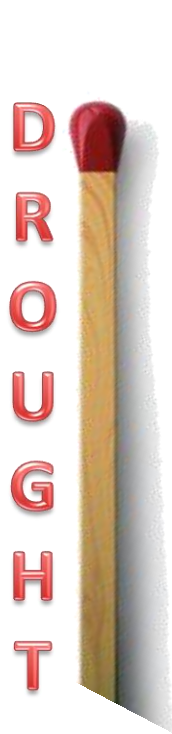
10:00 - 12:00 a.m.

Arizona Department of Water Resources

Verde Conference Rooms, 2<sup>nd</sup> Floor



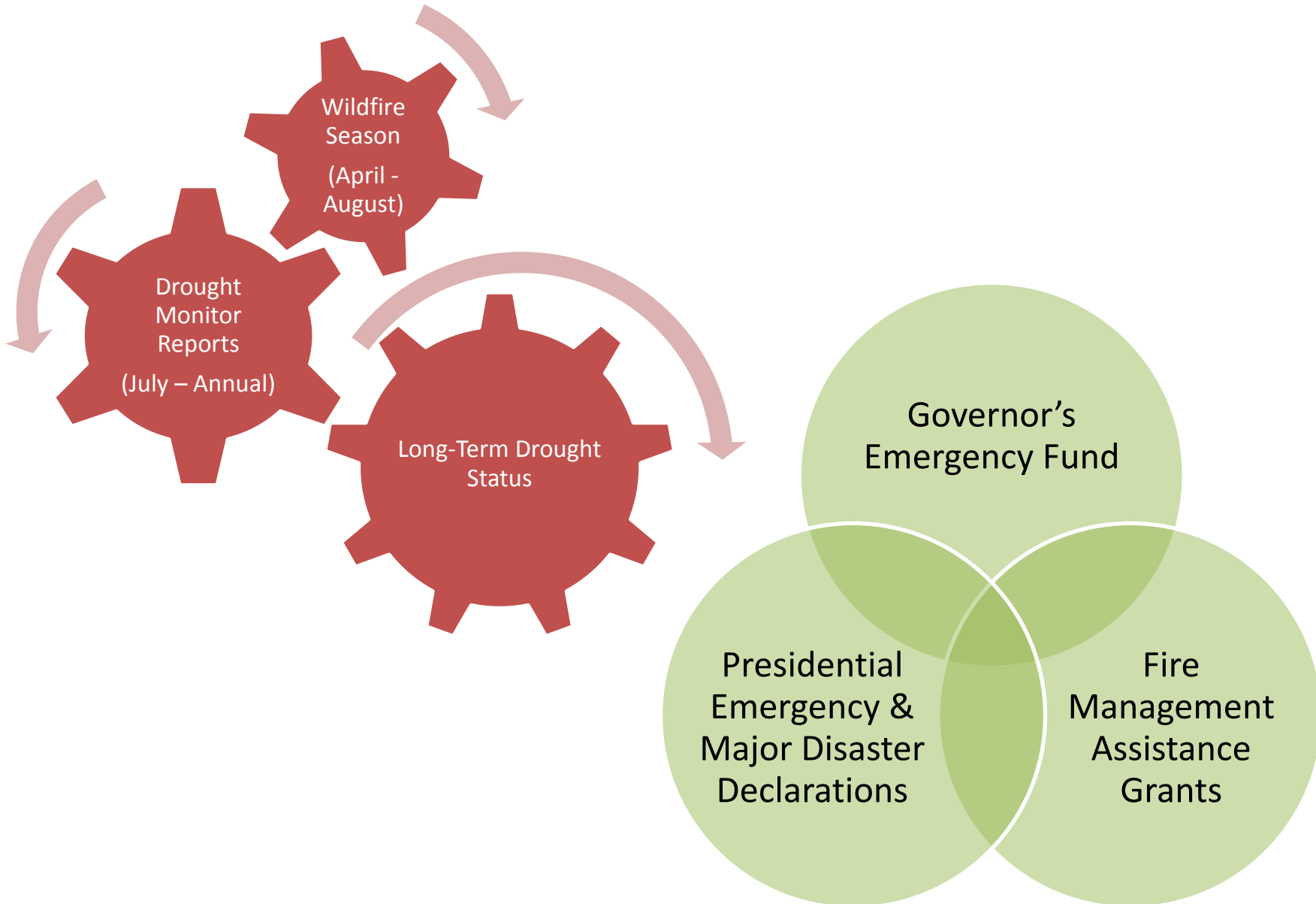
# AGENDA



**“In summary, drought plays multiple roles in creating conditions that promote fire in Arizona.** Persistent drought can stress trees, reduce resistance to insect outbreaks and pathogens, and over time cause directly and indirectly forest mortality and changes in the composition and structure of forests. Drought reduces fuel moisture, and persistent drought can substantially reduce the moisture of large, heavy dead and live fuels; **thus drought serves as a catalyst to fire.”**

*~ Arizona Drought Preparedness Plan – Background & Impact Assessment (pp. 10-11)*

# Assumptions



# Wildfire Totals In Arizona Since 2002

- 2002 -- 3,041 fires, 700,101 acres
  - 2003 -- 2,876 fires, 192,538 acres
  - 2004 -- 2,602 fires, 219,900 acres
  - 2005 -- 4,027 fires, 975,456 acres
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- 2006 -- 3,274 fires, 177,427 acres
  - 2007 -- 2,240 fires, 101,381 acres
  - 2008 -- 1,850 fires, 85,496 acres
  - 2009 -- 2,371 fires, 263,358 acres
  - 2010 -- 1,517 fires, 74,445 acres
  - 2011 -- 1,988 fires, 1,016,428 acres
  - 2012 -- 1,610 fires, 209,338 acres

# Declarations

	Fire	State	FMAG*	Federal
• 3,27				
• 177,	Pre-Suppression	\$192,390.07		
	Brins	\$6,942.71	\$658,092.61	
🔥 Brins	La Barranca		\$65,775.53	
🔥 S	Potato		\$36,241.71	
🔥 4,				
🔥 La B	Woody		\$135,566.78	
🔥 S				
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\* Watershed merged due to limited data.

# Declarations

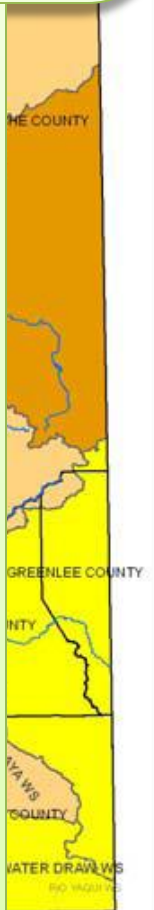
- 2,24
- 101

Fire

State

FMAG\*

Federal



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\* Watershed merged due to limited data.



# Declarations

- 1,85

- 85,4

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**Fire**

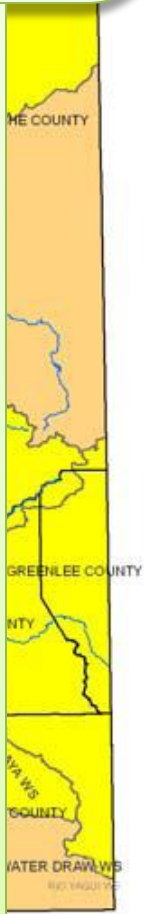
**State**

**FMAG\***

**Federal**

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\$167,186.15



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\* Watershed merged due to limited data.

# Declarations

	Fire	State	FMAG*	Federal
• 2,375	Mule Pass		\$400,123.12	
• 263	Water Wheel		\$192,972.73	



Water



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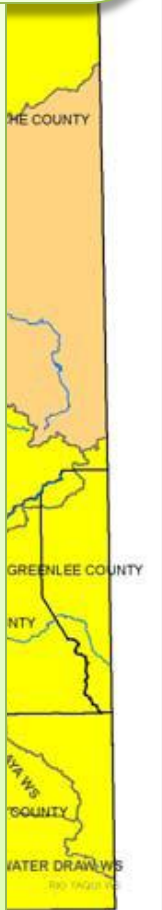
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Mule



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\* Watershed merged due to limited data.



# Declarations

- 1,511

**Fire**

**State**

**FMAG\***

**Federal**

Hardy

\$612,234.29

- 74,400

Schultz

\$585,290.52

**Flood**

**State**

**Federal**

Schultz

\$879,520.02

\$6,688,078.62

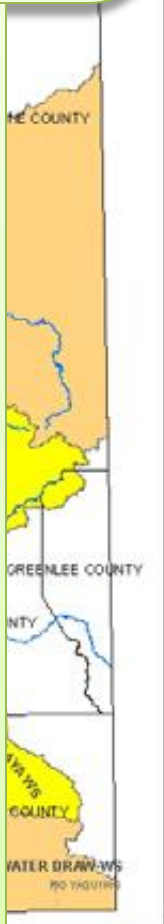
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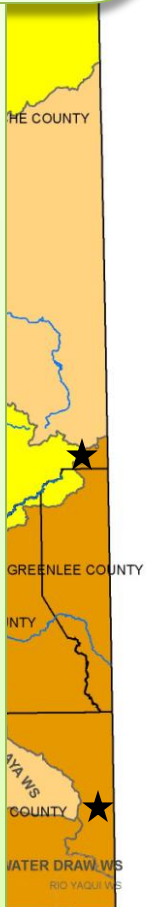
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Emergency Plan  
Committee

\*Watershed merged due to limited data.

# Declarations

• 1,98	<b>Fire</b>	<b>State</b>	<b>FMAG*</b>	<b>Federal</b>
• 1,01	Horseshoe Two	\$98,293.23	\$750,000.00	
	Wallow	\$196,066.86	\$3,692,476.71	
🔥	Locu Monument	See HS2	\$1,558,915.07	
🔥	<b>Flood</b>	<b>State</b>		<b>Federal</b>
🔥	30			
🔥	Hors	Tombstone	\$106,000.00	
🔥	p	Greenlee	\$400,000.00	
🔥	2	Coconino	\$500,000.00	
🔥	Mon			
🔥	Si			
🔥	30			
🔥	Wall			



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# Declarations

- 1,611 Fire

Fire	State	FMAG*	Federal
Gladiator	\$30,000.00		

- 209 Flood

Flood	State	FMAG*	Federal
Gladiator	\$100,000.00		



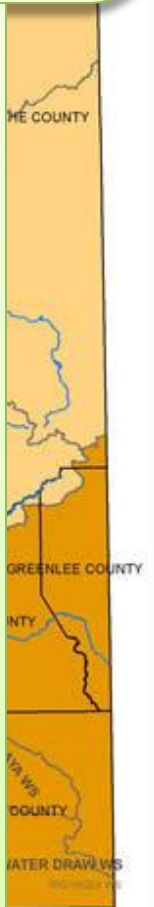
Gladiator



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# Declarations

2006 - 2012

<b>Fires</b>	<b>State</b>	<b>FMAG*</b>	<b>Federal</b>
	\$1,529,692.87	\$8,854,875.22	
	(\$2,213,718.81)		
	\$3,743,411.68	\$6,641,156.41	
<b>Floods</b>	<b>State</b>	<b>FMAG</b>	<b>Federal</b>
	\$1,985,520.02		\$6,688,078.62
<b>Total</b>	<b>State</b>	<b>FMAG</b>	<b>Federal</b>
	\$5,728,931.70	\$6,641,156.41	\$6,688,078.62
<b>Grand Total</b>	<b>\$19,058,166.73</b>		

\* State of Arizona pays 25% of FMAG

# Prior Notable Fire Declarations

Year	Fire	State	FMAG	Federal	GRAND TOTAL
1999	Rainbow	\$185,792.94	Not Available		
	Indian	\$150,882.40	\$766,588.42		
2002	Rodeo/Chediski (468,638 acres)	\$1,418,717.63	\$3,388,408.47	\$1,238,463.33	
2003	Aspen (84,750 acres)	\$675,568.52	\$2,312,991.73	\$5,363,459.27	
	Kinishba	\$33,358.85	\$286,116.51		
2004	Nuttall Complex & Willow Fire (119,500 acres)	\$281,298.28	\$251,890.75		
2005	Cave Creek Complex (243,950 acres)		\$506,548.12		
	Edge Complex (71,635 acres)		\$8,644.57		
<b>TOTAL</b>		\$2,745,618.62	\$7,521,188.57	\$6,601,922.60	<b>\$16,868,729.79</b>

# Other Drought Related Declarations

Year	Declaration	State
2001	Potable Water (Gila County)	\$42,111.38
2003	Potable Water (Coconino, Gila, & Navajo County)	\$42,844.61
	Forest Health (Bark Beetle)	\$2,319,881.57
<b>TOTAL</b>		\$2,404,837.56